

COC# 214

CHAIN OF CUSTODY REPORT

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(425) 420-9200 FAX 420-9210
(509) 924-9200 FAX 924-9290
(503) 906-9200 FAX 906-9210
(541) 383-9310 FAX 382-7588

Work Order #: M108004 PK0245

CLIENT: BRISTOL		INVOICE TO: BRISTOL		TURNAROUND REQUEST in Business Days* Organic & Inorganic Analyses <div style="display: flex; justify-content: space-around;"> <div> 10 7 5 4 3 2 1 <1 STD. </div> <div> 5 4 3 2 1 <1 STD. </div> </div> Petroleum Hydrocarbon Analyses <div style="display: flex; justify-content: space-around;"> <div> 5 4 3 2 1 <1 STD. </div> <div> OTHER Please Specify </div> </div> *Turnaround Requests less than standard may incur Rush Charges.	
REPORT TO: ANNE KRANAWETTER		P.O. NUMBER: 21090			
ADDRESS: AMCHITKA, AK					
PHONE: 907-770-0974 FAX: 770-0975					
PROJECT NAME: AMCHITKA		REQUESTED ANALYSES			
PROJECT NUMBER: 21090					
SAMPLED BY: KLP/ARK					
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	Metals 7060 1631	PCBs EPA 8062		
1. 01AMLA02RK	8/2/01 1425	X	X		
2. 01AMLA03RK	8/2/01 1431	X	X		
3. 01AMLA04RK	8/2/01 1445	X	X		
4. 01AMLA05RK	8/2/01 1420	X	X		
5. 01AMLA06RK	8/2/01 1425	X	X		
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
RELINQUISHED BY: Kyle Peterson	DATE: 8/2/01	RECEIVED BY: Craig Bradie	DATE: 8/2/01		
PRINT NAME: Kyle Peterson	FIRM: BRISTOL	PRINT NAME: Craig Bradie	FIRM: NCA		
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:		
PRINT NAME:	FIRM:	PRINT NAME:	FIRM:		
ADDITIONAL REMARKS: Sewage Lagoon Rocks				TEMP: 11.6°	

CHAIN OF CUSTODY REPORT

Work Order #: **PIK0245**

CLIENT: Bristol Amch. FKA		INVOICE TO:												TURNAROUND REQUEST in Business Days* Organic & Inorganic Analyses <div style="display: flex; justify-content: space-around;"> <div>10 7 5 4 3 2 1 <1</div> <div>STD.</div> <div>5 4 3 2 1 <1</div> <div>STD.</div> </div> Petroleum Hydrocarbon Analyses <div style="display: flex; justify-content: space-around;"> <div>5 4 3 2 1 <1</div> <div>STD.</div> </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">OTHER</div> Please Specify _____ <small>*Turnaround Requests less than standard may incur Rush Charges.</small>													
REPORT TO:		P.O. NUMBER:																									
ADDRESS:																											
PHONE:		FAX:		REQUESTED ANALYSES												MATRIX (W, S, O) # OF CONT. COMMENTS N' WO ID											
PROJECT NAME:																											
PROJECT NUMBER:																											
SAMPLED BY:																											
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME																										
1. M108004	see Bottle	metals																									
2. 175	↓	see kont																									
3.																											
4.																											
5.																											
6.																											
7.																											
8.																											
9.																											
10.																											
11.																											
12.																											
13.																											
14.																											
15.																											
RELINQUISHED BY: Steph Wilson		FIRM: NCA		DATE: 11/7/01				TIME: 1418				RECEIVED BY: Kim Davis				FIRM: LCA				DATE: 11/8/01				TIME: 0855			
RELINQUISHED BY:		FIRM:		DATE:				TIME:				RECEIVED BY:				FIRM:				DATE:				TIME:			
PRINT NAME:												PRINT NAME:															
ADDITIONAL REMARKS:																				TEMP:				PAGE OF			

NORTH C EK ANALYTICAL COOLER RECEIPT RM
(Army Corp. compliant)

Client: Bristol Amchitka

1. Please sign for receipt and opening of: 1 cooler or other :

By (print) Kim Davis (sign) K Davis

2. Date samples received 11/8/01 Date opened: Same X or

Bennett 3. Delivered by X NCA courier Fed-Ex UPS Express Messenger Client Other
Air bill # if applicable (Put copy of shipping papers, etc. in file)

4. There were 2 custody seals present, signed by ST? date 11/7/01

5. Were custody seals unbroken and intact at the date and time of arrival? X yes no

6. Was ice used? X yes no Type of ice: blue ice X gel ice real ice
Temperature (degrees C) Raytek Thermometer 0.6 Digi-Therm. (probe for temp. blank)

Temp blank frozen
7. Are custody papers sealed in a plastic bag and taped inside to the lid? X yes no

8. Were custody papers filled out properly (ink, signed, etc.)? X yes no
If "no" please specify:

9. Was project identifiable from custody papers? yes X no
Name of the project (if applicable)

10. Initial and date for unpacking: SP (initials) date 11/08/01

11. Packing material: X bubble wrap/bag styrofoam cardboard other

12. Were samples in bags? yes X no

13. Did all containers indicated on the COC arrive? X yes no
If "no" please indicate which containers were absent

14. Were all containers unbroken and labels in good condition? X yes no
If "no" please indicate which containers

15. Were all bottle labels complete (ID, date, time, signature, etc.)? X yes no
Do the ID's, times, etc. agree with the COC? X yes no
If "no" please indicate which containers

16. Are containers properly preserved for indicated analysis? X yes no

17. Is there adequate volume for the test(s) requested? X yes no

18. If voa vials were submitted, are they free of bubbles? X N/A yes no
If "no" please indicate which containers

19. Log-in Phase: Date samples were logged in: 11/08/01 Elm Project #P 1K0245

20. Logged in by (print) Sarah Passage (sign) Sarah Passage

21. Was the project manager notified of status? (use back of form as a record) yes X no



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

RECEIVED
NOV 15 2001

14 November, 2001

Steve Johnson
Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 11/08/01 08:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jerry Orlando
Project Manager/QA

Work Orders included in this report:

P1K0245



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090, PO# 21090
Project Manager: Steve Johnson

Reported:
11/14/01 13:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMLA02RK	P1K0245-01	Other dry	08/02/01 14:25	11/08/01 08:55
01AMLA03RK	P1K0245-02	Other dry	08/02/01 14:31	11/08/01 08:55
01AMLA04RK	P1K0245-03	Other dry	08/02/01 14:45	11/08/01 08:55
01AMLA05RK	P1K0245-04	Other dry	08/02/01 14:20	11/08/01 08:55
01AMLA06RK	P1K0245-05	Other dry	08/02/01 14:25	11/08/01 08:55

North Creek Analytical - Portland

Jerry Orlando, Project Manager/QA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

1 of 7



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090, PO# 21090
Project Manager: Steve Johnson

Reported:
11/14/01 13:17

Total Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA02RK (P1K0245-01) Other dry						Sampled: 08/02/01 Received: 11/08/01			
Arsenic	0.925	0.500	mg/kg wet	1	EPA 6020	11/09/01	11/13/01	1110303	
Cadmium	ND	0.500	"	"	"	"	"	"	
Chromium	0.665	0.500	"	"	"	"	"	"	
Lead	4.34	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	"	"	"	"	"	
01AMLA03RK (P1K0245-02) Other dry						Sampled: 08/02/01 Received: 11/08/01			
Arsenic	0.936	0.500	mg/kg dry	1	EPA 6020	11/09/01	11/13/01	1110303	
Cadmium	ND	0.500	"	"	"	"	"	"	
Chromium	ND	0.500	"	"	"	"	"	"	
Lead	3.06	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	"	"	"	"	"	
01AMLA04RK (P1K0245-03) Other dry						Sampled: 08/02/01 Received: 11/08/01			
Arsenic	0.754	0.500	mg/kg dry	1	EPA 6020	11/09/01	11/13/01	1110303	
Cadmium	ND	0.500	"	"	"	"	"	"	
Chromium	ND	0.500	"	"	"	"	"	"	
Lead	2.55	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	"	"	"	"	"	
01AMLA05RK (P1K0245-04) Other dry						Sampled: 08/02/01 Received: 11/08/01			
Arsenic	1.34	0.500	mg/kg dry	1	EPA 6020	11/09/01	11/13/01	1110303	
Cadmium	ND	0.500	"	"	"	"	"	"	
Chromium	ND	0.500	"	"	"	"	"	"	
Lead	5.72	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	"	"	"	"	"	

North Creek Analytical - Portland

Jerry Orlando

Jerry Orlando, Project Manager/QA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

2 of 7



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090, PO# 21090
Project Manager: Steve Johnson

Reported:
11/14/01 13:17

Total Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA06RK (PIK0245-05) Other dry						Sampled: 08/02/01 Received: 11/08/01			
Arsenic	1.18	0.500	mg/kg dry	1	EPA 6020	11/09/01	11/13/01	1110303	
Cadmium	ND	0.500	"	"	"	"	"	"	
Chromium	ND	0.500	"	"	"	"	"	"	
Lead	4.31	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	"	"	"	"	"	

North Creek Analytical - Portland

Jerry Orlando

Jerry Orlando, Project Manager/QA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

3 of 7

Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

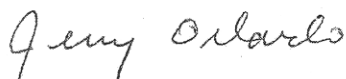
Project: Amchitka
 Project Number: 21090, PO# 21090
 Project Manager: Steve Johnson

Reported:
 11/14/01 13:17

Percent Dry Weight (Solids) per Standard Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA03RK (P1K0245-02) Other dry						Sampled: 08/02/01 Received: 11/08/01			
% Solids	97.2	1.00	% by Weight	1	NCA SOP	11/09/01	11/12/01	1110271	O-07
01AMLA04RK (P1K0245-03) Other dry						Sampled: 08/02/01 Received: 11/08/01			
% Solids	96.8	1.00	% by Weight	1	NCA SOP	11/09/01	11/12/01	1110271	O-07
01AMLA05RK (P1K0245-04) Other dry						Sampled: 08/02/01 Received: 11/08/01			
% Solids	94.9	1.00	% by Weight	1	NCA SOP	11/09/01	11/12/01	1110271	O-07
01AMLA06RK (P1K0245-05) Other dry						Sampled: 08/02/01 Received: 11/08/01			
% Solids	96.4	1.00	% by Weight	1	NCA SOP	11/09/01	11/12/01	1110271	O-07

North Creek Analytical - Portland



Jerry Orlando, Project Manager/QA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

4 of 7



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090, PO# 21090
Project Manager: Steve Johnson

Reported:
11/14/01 13:17

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1110303 - EPA 3050

Blank (1110303-BLK1)

Prepared: 11/09/01 Analyzed: 11/12/01

Arsenic	ND	0.500	mg/kg
Cadmium	ND	0.500	"
Chromium	ND	0.500	"
Lead	ND	0.500	"
Selenium	ND	0.500	"

LCS (1110303-BS1)

Prepared: 11/09/01 Analyzed: 11/13/01

Arsenic	11.5	0.500	mg/kg	10.0	115	80-120
Cadmium	9.98	0.500	"	10.0	99.8	80-120
Chromium	10.3	0.500	"	10.0	103	80-120
Lead	19.9	0.500	"	20.0	99.5	80-120
Selenium	19.2	0.500	"	20.0	96.0	80-120

Duplicate (1110303-DUP1)

Source: P1K0245-03

Prepared: 11/09/01 Analyzed: 11/13/01

Arsenic	0.541	0.500	mg/kg dry	0.754	32.9	40
Cadmium	ND	0.500	"	ND		40
Chromium	ND	0.500	"	ND	1.83	40
Lead	2.53	0.500	"	2.55	0.787	40
Selenium	ND	0.500	"	ND		40

Matrix Spike (1110303-MS1)

Source: P1K0245-03

Prepared: 11/09/01 Analyzed: 11/13/01

Arsenic	12.2	0.500	mg/kg dry	10.1	0.754	113	75-125
Cadmium	9.47	0.500	"	10.1	ND	93.8	75-125
Chromium	10.1	0.500	"	10.1	ND	96.7	75-125
Lead	21.9	0.500	"	20.3	2.55	95.3	75-125
Selenium	19.0	0.500	"	20.3	ND	93.6	75-125

Matrix Spike (1110303-MS2)

Source: P1K0162-01

Prepared: 11/09/01 Analyzed: 11/13/01

Arsenic	27.1	0.500	mg/kg dry	11.8	13.3	117	75-125	
Cadmium	12.0	0.500	"	11.8	ND	99.4	75-125	
Chromium	53.8	0.500	"	11.8	38.8	127	75-125	Q-03
Lead	86.8	0.500	"	23.6	54.2	138	75-125	Q-03
Selenium	22.0	0.500	"	23.6	0.707	90.2	75-125	

North Creek Analytical - Portland

Jerry Orlando

Jerry Orlando, Project Manager/QA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

5 of 7



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090, PO# 21090
Project Manager: Steve Johnson

Reported:
11/14/01 13:17

Percent Dry Weight (Solids) per Standard Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1110271 - Dry Weight

Duplicate (1110271-DUP1)	Source: P1K0234-02		Prepared: 11/09/01		Analyzed: 11/12/01					
% Solids	90.5	1.00 % by Weight		89.3				1.33	20	
Duplicate (1110271-DUP2)	Source: P1K0252-01		Prepared: 11/09/01		Analyzed: 11/12/01					
% Solids	86.6	1.00 % by Weight		87.4				0.920	20	
Duplicate (1110271-DUP3)	Source: P1K0249-01		Prepared: 11/09/01		Analyzed: 11/12/01					
% Solids	45.9	1.00 % by Weight		44.9				2.20	20	

North Creek Analytical - Portland

Jerry Orlando

Jerry Orlando, Project Manager/QA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

6 of 7

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 21090, PO# 21090
Project Manager: Steve Johnson

Reported:
11/14/01 13:17

Notes and Definitions

O-07 This sample was extracted outside the EPA recommended holding time.

Q-03 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already present in the sample.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

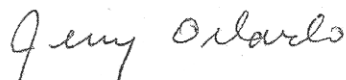
NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Portland



Jerry Orlando, Project Manager/QA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

North Creek Analytical, Inc.
Environmental Laboratory Network

7 of 7